frequency f1). For example, user equipment **114**A may detect carrier frequency f2 transmitted by a wireless access point serving small cell **118**B.

[0039] At **250**, user equipment **114**A may report a detected small cell carrier frequency and/or small cell identity to base station **110**A, in accordance with some example embodiments. For example, user equipment **114**A may send a measurement report indicating the detection of wireless access point serving small cell **118**B at carrier frequency f2.

[0040] At **252**, base station **110**A may then determine whether to reconfigure user equipment **114**B to scan at carrier frequency f2 to enable the user equipment **114**B to detect small cell **118**B, in accordance with some example embodiments. At **254**, base station **110**A may send to user equipment **114**B an indication to reconfigure the small cell measurements to measure carrier frequency f2 and/or couple to small cell **118**B, in accordance with some example embodiments. Consequently, user equipment **114**B may detect small cell **118** at carrier frequency f2 at **256**. When reconfigured user equipment **114**B detects an allowed small cell, such as small cell **118**B, user equipment **114**B may detect and couple to the respective small cell **118**B earlier than the originally scheduled measurement interval (for example, t<T) as shown at FIG. **2**.

[0041] In some example embodiments, the disclosed distributed small cell search may be used when there is a single small cell frequency or more than one small cell frequency.

[0042] Although FIGS. **1** and **2** depicts the user equipment in a single cluster, a user equipment may be included in more than one cluster (or group) for purposes of distributed inter-frequency scanning for small cells. When this is the case, the user equipment, which is a member of more than one group, may be scheduled according to the multiple group memberships.

[0043] Before providing additional examples, the following provides additional description regarding the system framework **100** in which some of the example embodiments described herein may be implemented.

[0044] In the example of FIG. **1**, base stations **110**A-B may be configured as an eNB base station serving macrocells **112**A and **112**B (also referred to herein as cells and coverage areas). The wireless access points (WAPs) serve wireless local area networks, such as small cells **118**A-D. For example, small cells **118**A-D may be implemented as a picocell, a femtocell, and the like served by wireless access points, examples of which include a picocell base station, a femtocell base station, a home base station, a WiFi access point, a WLAN access point, and a home E-UTRAN node B base station (HeNB) configured in accordance with standards, such as for example for example Third Generation Partnership Project (3GPP) Long Term Evolution (LTE). Although LTE is referred to herein, it is merely an example as other standards and technologies may be used as well.

[0045] Moreover, when base stations **110**A-B are implemented as an evolved Node B (eNB) type base station, as noted above, the base stations may be configured in accordance with standards, including the Long Term Evolution (LTE) standards, such as for example 3GPP TS 36.201, Evolved Universal Terrestrial Radio Access (E-UTRA); Long Term Evolution (LTE) physical layer; General description, 3GPP TS 36.211, Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation, 3GPP TS 36.212, Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and channel coding, 3GPP TS 36.213, Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures, 3GPP TS 36.214, Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer—Measurements, and any subsequent additions or revisions to these and other 3GPP series of standards (collectively referred to as LTE standards).

[0046] In some exemplary embodiments, system **100** may include wireless access links. These access links may include downlinks for transmitting to user equipment and uplinks for transmitting from user equipment to a wireless access point/base station. The downlinks and uplinks may each comprise a modulated radio frequency carrying information, such as for example user data, control messages, radio resource control (RRC) messages, and the like. Moreover, the wireless access points/base stations may include other links, such as for example backhaul links, to other networks (for example, other mobile networks, the Internet, and the like), network nodes, and the like.

[0047] In some example embodiments, the user equipment, such as for example user equipment **114**A-D, may be implemented as a mobile device and/or a stationary device. The user equipment are often referred to as, for example, mobile stations, mobile units, subscriber stations, wireless terminals, tablets, smart phones, wireless devices, or the like. A user equipment may be implemented as, for example, a wireless handheld device, a wireless plug-in accessory, or the like. The user equipment may, in some example embodiments, be configured to operate in a heterogeneous network.

[0048] Although system **100** depicts a certain configuration and quantity of base stations, wireless access points, user equipment, and cells, system **100** may include other quantities, configurations, and devices as well.

[0049] FIG. **3** depicts another example process for distributed inter-frequency scanning for small cells, in accordance with some example embodiments.

[0050] At **310**, user equipment may receive an indication to perform a distributed scan, in accordance with some example embodiments. For example, the indication may signal may be sent by base station **110**A to user equipment **114**A to scan for one or more carrier frequencies (such as small cell carrier frequencies) at one or more time intervals. The scanning may be distributed among one or more other user equipment, such as user equipment **114**B-C, proximate to user equipment **114**A. Moreover, the scanning may be in accordance with a schedule, such as the one described in Table 1. The schedule may be included in the indication received at **310**, although the schedule may be provided in other ways (for example, in a more static manner, such as defined in a standard and the like). In some example embodiments, the indication may also signal to the user equipment **114**A that it is part of a group/cluster, which may be determined by the network/base station based on location information and the like indicating that user equipment **114**A-C are proximate to each other.

[0051] At **320**, a user equipment may perform, in response to the received indication, a distributed inter-frequency carrier scan by measuring a first carrier frequency during a first time period. For example, user equipment **114**A may measure carrier frequency f1 during a first time period, while proximate user equipment **114**B-C measure either carrier frequency f2 or remain idle. During the next time period, user equipment **114**A may measure carrier frequency f2, while user equipment **114**B-C measure carrier frequency f1 or remain idle.